

Highlights of [GAO-12-791](#), a report to congressional committees

Why GAO Did This Study

According to OMB, the federal executive branch plans to spend at least \$75 billion on information technology (IT) investments in fiscal year 2012. In response to a statute which mandates that GAO identify duplicative activities within federal agencies, GAO previously identified enterprise architecture as a mechanism for reducing duplication and overlap in investments. An architecture is a “blueprint” that describes how an organization operates in terms of business processes and technology, how it intends to operate in the future, and how it plans to transition to the future state. Knowing whether architecture outcomes are being achieved requires defining the architecture’s goals, establishing a method and metrics to measure architecture outcomes, and periodically measuring and reporting these outcomes. To assess agencies’ use of architecture as a mechanism for reducing duplication and overlap, GAO committed to determine the extent to which agencies are measuring and reporting architecture outcomes and benefits. To do this, GAO reviewed relevant documentation from 27 major federal agencies, reviewed the results of a GAO survey on the benefits of using architecture, and interviewed agency officials.

What GAO Recommends

GAO is making recommendations to the agencies and OMB to improve measurement and reporting of architecture outcomes. In commenting on a draft of this report, OMB and most of the agencies generally agreed with the findings and recommendations.

View [GAO-12-791](#). For more information, contact Valerie C. Melvin at (202) 512-6304 or melvinv@gao.gov.

ORGANIZATIONAL TRANSFORMATION

Enterprise Architecture Value Needs to Be Measured and Reported

What GAO Found

Among the 27 agencies that GAO studied, all have fully or partially defined goals or purposes for their architectures, 11 have fully or partially established a method or metrics for measuring outcomes resulting from the use of their architectures, while 5 have fully or partially measured and reported outcomes and benefits (see table).

Agency	Goals or purpose defined	Metrics and method established	Outcomes and benefits periodically measured and reported
Agriculture	●	○	○
Air Force	●	○	○
Army	●	●	○
Commerce	●	●	○
Defense—Business Enterprise Architecture	●	○	○
Defense—Enterprise Architecture	●	○	○
Education	●	●	●
Energy	●	○	○
Health and Human Services	●	●	●
Homeland Security	●	○	○
Housing and Urban Development	●	●	●
Interior	●	○	○
Justice	●	○	○
Labor	●	○	○
Navy	●	○	○
State	●	○	○
Transportation	●	●	○
Treasury	●	●	●
Veterans Affairs	○	○	○
Environmental Protection Agency	●	○	○
General Services Administration	●	●	○
National Aeronautics and Space Administration	●	○	○
National Science Foundation	●	○	○
Nuclear Regulatory Commission	●	●	○
Officer of Personnel Management	●	●	○
Small Business Administration	●	○	○
Social Security Administration	●	○	○
United States Agency for International Development	●	●	●

Source: GAO analysis of agency data.

Agencies cited a lack of guidance as a key reason why they have not established methods and metrics for measuring outcomes and benefits. Although the Office of Management and Budget (OMB) has issued recent enterprise architecture guidance to agencies, OMB has not yet provided sufficient details on the method and metrics that could be used to measure architecture program outcomes.